

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In Re the Application of:

YOUNG-DOO KIM, ET AL.

Application No.:

Filed:

For: **APPARATUS AND METHOD FOR
ADAPTIVELY MODULATING SIGNAL
BY USING LAYERED TIME-SPACE
DETECTOR USED IN MIMO SYSTEM**

Art Group:

Examiner:

INFORMATION DISCLOSURE STATEMENT UNDER 37 C.F.R. §1.97

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

In accordance with the duty of disclosure, enclosed is a copy of Information Disclosure Statement by Applicant (form PTO/SB/08), which is being submitted concurrently with the Utility Application. It is respectfully requested that the cited references be considered and that the enclosed copy of PTO/SB/08 be initialed by the Examiner to indicate such consideration and a copy thereof returned to applicant(s).

The submission of this Information Disclosure Statement is not to be construed as a representation that a search has been made in the subject application and is not to be construed as an admission that the information cited in this statement is material to patentability.

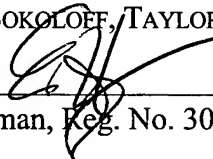
Please charge any fees due to Deposit Account 02-2666. A duplicate copy of the Fee Transmittal (PTO/SB/17) is enclosed for this purpose.

Date: _____

12/15/03

Respectfully submitted,

BLAKELY, SOKOLOFF, TAYLOR & ZAFMAN LLP


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Information Disclosure Statement

New U.S. Patent Application for
APPARATUS AND METHOD
FOR ADAPTIVELY MODULATING SIGNAL
BY USING LAYERED TIME-SPACE DETECTOR
USED IN MIMO SYSTEM
Our Ref. No.: P03E1013/US/jk

Reference No.:

- (1) KR Laid-Open No. 98-13075
- (2) US Patent No. 6,097,771
- (3) US Patent No. 4,679,227
- (4) US Patent No. 6,317,466
- (5) Multiuser OFDM with Adaptive Subcarrier, Bit, and Power Allocation
(*IEEE JOURNAL ON SELECTED AREA IN COMMUNICATIONS, VOL. 17, NO. 10, OCTOBER 1999, Pages 1747-1758*)
- (6) SPATIO-TEMPORAL CODING FOR WIRELESS COMMUNICATIONS
(*0-7803-3336/5/96, 1996 IEEE, Pages 1809-1814*)
- (7) Iterative Bit & Power Allocation for V-BLAST based OFDM MIMO System in Frequency Selective Fading Channel
(*0-7803-7376-6/02, 2002 IEEE, Pages 271-275*)
- (8) A Simplified Bit Allocation for V-BLAST based OFDM MIMO System in Frequency Selective Fading Channel
(*0-7803-7400-2/02, 2002 IEEE, Pages 411-415*)
- (9) V-BLAST: An Architecture for Realizing Very High Data Rates Over the Rich-Scattering Wireless Channel
(*0-7803-4900-8/98, 1998 IEEE, Pages 295-300*)

Substitute for form 1449A/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT <i>(use as many sheets as necessary)</i>				Complete if Known	
Application Number					
Filing Date					
First Named Inventor		Young-Doo KIM			
Art Unit					
Examiner Name					
Attorney Docket Number		51876P442			
Sheet	1	of	2		

U.S. PATENT DOCUMENTS					
Examiner Initials*	Cite No. ¹	Document Number Number - Kind Code ² (if known)	Publication Date or Issue Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		US-6,317,466 B1	11-13-2001	Foshini et al.	
		US-4,679,227	07-07-1997	Hughes-Hartogs	
		US-6,097,771	08-01-2000	Foschini	
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FOREIGN PATENT DOCUMENTS					
Examiner Initials*	Cite No. ¹	Foreign Patent Document Country Code ³ - Number ⁴ - Kind Code ⁵ (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Laid-Open No. 98-13075	04-30-1998	Wireless Communication	

Examiner Signature	Date Considered
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*Examiner: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication.

¹Applicant's unique citation designation number (optional). ²See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. ³Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴For Japanese patent documents, the indication of the year of reign of the Emperor must precede the serial number of the patent document. ⁵Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶Applicant is to place a check mark here if English language Translation is attached.

Based on PTO/SB/08A (08-03) as modified by Blakely, Solokoff, Taylor & Zafman (wlr) 08/11/2003.

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